

Welcome to the University Honors Program's ***Thesis and Capstone Handbook***. The purpose of this handbook is to provide students and faculty mentors with clear guidelines and support for the successful completion of an honors capstone project. Because a traditional long essay—or thesis—is just one of many possible capstone projects, this handbook generally uses the broader term “capstone” to describe the final honors project.

## Table of Contents

<b>What is an Honors Capstone Project?</b> .....	<b>2</b>
<b>Requirements for Honors Capstone Projects</b> .....	<b>3-6</b>
<b>How Do Students Discover Great Project Ideas?</b> .....	<b>7</b>
<b>Brief List of Deadlines</b> .....	<b>8</b>
<b>Suggested Thesis/Capstone Timeline</b> .....	<b>9</b>
Suggested Timeline for Spring Graduates.....	10
Suggested Timeline for Fall Graduates .....	11
<b>The Thesis/Capstone Committee</b> .....	<b>12</b>
Student Responsibilities .....	13
Faculty Mentor Responsibilities.....	14
Committee Member(s)/Departmental Honors Advisor Responsibilities .....	15
University Honors Program and Director Responsibilities .....	16
<b>Resources and Assistance</b> .....	<b>17</b>
<b>Suggestions for Formatting the Thesis/Capstone Project</b> .....	<b>18</b>
<b>Frequently Asked Questions</b> .....	<b>19</b>
<b>Examples of Outstanding Projects</b> .....	<b>20-23</b>
<b>Advice from Past Honors Students</b> .....	<b>24-26</b>
<b>Forms (available at <a href="http://honors.usu.edu">http://honors.usu.edu</a>)</b>	
Graduation Checklist	
Thesis/Capstone Proposal Form	
Thesis/Capstone Cover Page	
Thesis/Capstone Evaluation Form	
Electronic Thesis/Capstone Approval Form	

## **What is an Honors Capstone Project?**

A thesis or capstone project is required to graduate with honors because it integrates a student's specific knowledge of the discipline with the key skills of an honors education: critical thinking, independent research, interdisciplinary learning, and civic engagement. While most undergraduates at USU gain some experience in these four skills, honors students can consistently integrate them and are therefore uniquely qualified as USU's most dynamic citizen scholars. Honors students always question ideas, take responsibility for their own learning, consider the relationships between radically different ideas, and seek ways to make the world a better place. The capstone project is the culmination of an honors undergraduate education because it demonstrates that honors students can both work collaboratively with their mentors and manage a long-term independent project. Honors students leave USU as budding experts in their disciplines and as leaders in and outside of their fields, qualities that distinguish them from their peers when they apply for jobs, graduate programs, fellowships, or internships.

The topics of honors capstone projects vary according to the student's major and interests. Every discipline requires students to engage in research, defined as the search for knowledge and the communication of that knowledge to others. In their capstone projects, honors students discover knowledge through a range of discipline-appropriate activities and share that knowledge in a variety of different ways (see [capstone requirements](#) for more details).

All honors capstone projects offer students the opportunity to work closely with professors who share their interests. These professional relationships can shape the student's future in fundamental ways: capstone mentors can provide detailed recommendation letters, reliable advice about how to structure and complete a project, connections to other professionals in the field, and insight into how to pursue professional goals. These faculty mentors guide the professional development of honors students and thus help to build the future of their own fields in tangible ways.

## **Requirements for Honors Capstone Projects**

The defining feature of an honors capstone is that it allows the student to make and articulate research discoveries with the help of a faculty mentor. All honors capstones must include:

### **Research**

Research is the search for knowledge and the communication of that knowledge to others. Honors thesis/capstone projects give students the opportunity to discover knowledge through a range of activities, including lab work, field study, professional apprenticeships, archival investigation, close reading of literature, and creative production. Students then have the chance to disseminate that knowledge through media such as posters, conference presentations, co-authored publications, data-analysis reports or papers, business plans with professional analysis, argumentative thesis writing, and performances or other creative production with thoughtful process analysis. The form of this final product is determined in consultation with the faculty mentor and based on discipline-specific expectations. To help students understand the place of their own research within the discipline as a whole, they will typically create a bibliography or literature review with the help of their faculty mentors; students should format all citations correctly, according to the standards in their disciplines. This work is begun with the thesis/capstone proposal and then usually polished and incorporated into the finished capstone project. Students whose research involves animals or human subjects (e.g. working with laboratory animals, talking to children/adults/elderly individuals, administering surveys) may need approval from the Institutional Review Board and/or the Institutional Animal Care and Use Committee. Mentors and students should work together early and consult these links for more information:

[IRB Basics: Getting Started](#)

[Institutional Animal Care and Use Committee Information](#)

### **Faculty Mentoring**

All honors students create a thesis/capstone committee that consists of their primary faculty mentor and at least one other faculty member who must approve the final project. This second member is typically the Departmental Faculty Honors Advisor, a representative from a departmental or college honors committee, or a professor in a field related to the project's topic. The role of the primary faculty mentor on an honors capstone is crucial: this mentor works closely with the student, helping him or her to focus and refine the project, develop a realistic timeline and work plan, understand and address research and writing challenges, and revise, polish, and present the final product. Because of the nature of this work, all primary honors capstone mentors must be full-time USU faculty members with a terminal degree or appropriate credentials in the major field (appropriate degrees or credentials may vary by field). Visiting or part-time instructors may serve as capstone committee members, provided they can see the project through to its completion. Please see *The Thesis/Capstone Committee* for more details about both faculty and student responsibilities in the thesis/capstone process. Briefly, students are responsible for securing their primary faculty mentor and committee member(s), completing a thesis/capstone proposal, meeting the agreed-upon deadlines for the project, communicating frequently and clearly with all committee members, arranging for (and documenting) the public presentation of their work, and formatting the final product according to Honors Program guidelines.

## **Thesis/Capstone Project Proposal**

Prior to enrolling in the final thesis/capstone course (see *Course Credits/Hours of Work*), honors students typically enroll in HONR 3900, a one-credit class designed to support honors students as they begin their thesis/capstone projects. The course requires students to study past honors capstone projects, define their own projects, choose their faculty mentors, and work with those mentors to complete thesis/capstone proposals. Students who work with a professor on an existing research project may quote and cite briefly from the professor's research proposal in their own thesis/capstone proposals, but they must very clearly define their own roles in such projects and distinguish both their words and their roles from those of the professor. Please follow the guidelines on the [Thesis/Capstone Proposal form](#). In addition, if a student's major or minor requires its own non-honors senior capstone experience, honors students may use that work as the starting point for an honors project that deepens and extends the regular capstone experience in the major. With the help of the faculty mentor, who may or may not be the instructor of that standard capstone course, honors students must articulate clearly and specifically in the thesis/capstone proposal how the honors project goes substantially beyond the work of the regular capstone experience in the major.

## **Final Product**

Since all honors capstones must involve research, they require students to seek knowledge and to communicate that knowledge to others. Pursuing knowledge may involve laboratory, library, field, creative, analytical, or experiential work. Communicating that knowledge may involve the construction of research posters, oral presentations, written analyses or reports, live performances and lectures, creative production and process analysis, business plans with professional analysis, and academic analyses of the research process. In some cases, the final product is primarily the public presentation of the project (a performance, show, or organized event). Students and faculty are encouraged to consider the role of writing itself in the research as they determine the appropriate amount of writing and other materials required for each project. Honors capstone projects that include material in addition to writing (experiential or field data, laboratory results, mathematical calculations, performances, photographs, art) must also include some analytical, process-oriented writing, typically at least 5,000 words, although any substantive body of work appropriate to the discipline (including, for example, professional portfolios of artistic documentation, scientific diagrams, comparative charts, mechanical plans, or mathematical work) may be acceptable, as long as the faculty mentor and committee members agree that this product will best serve the student's goals. Honors thesis projects for which writing itself is the primary final product (written analyses of specific texts, library research, and/or archival work) will typically consist of at least 10,000 words, roughly the length of a publishable manuscript. Academic standards vary across disciplines, and faculty mentors and honors students are encouraged to discuss these expectations early in the process, as they complete a thesis/capstone proposal. Suggested minimum word counts typically do not include bibliography, supplementary material, or appendices, unless that material is central to project documentation. *Please remember that if a student's major or minor requires its own non-honors senior capstone experience, honors students must clearly articulate within the final product itself how their honors capstone project exceeds and builds upon the requirements of the standard major's capstone.* The final product, in whatever form(s), should be high quality work that makes both student and mentor proud. Students and faculty will need to allow plenty of time for multiple drafts, rehearsals, tests, revisions, etc. Future students and faculty will examine this work as a model, and the University Honors Program therefore will not approve capstone proposals or projects that fail to demonstrate the value and possibilities of such projects.

## **Reflective Writing**

All capstone projects must include 1000-1500 words (approximately 2-3 double-spaced pages) of reflective writing that describes and evaluates the process of completing the written and any non-written parts of the thesis/capstone project. The reflective writing is in addition to—and different from—the final product writing required above. While process or professional analyses that are part of the final product analyze the research work of the capstone project, this brief section reflects upon the process of completing a capstone project, briefly outlining some of the project's problems, challenges, and triumphs and offering specific advice to future students beginning the capstone process. Great honors capstones do all of the following, and their reflections articulate how they did it:

1. Create a capstone experience for the student's undergraduate education
2. Add substantially to the student's overall education and/or future goals
3. Create a positive, meaningful mentor relationship in support of the student's education and/or future goals
4. Deepen the student's research experience within his or her major
5. Require critical thinking about topics in that major
6. Broaden the student's experience across disciplines (sometimes in more obvious ways than others, but students should always think broadly and across disciplines about the impact of their work)
7. Engage the student in his or her local or global community (again, this engagement might be very obvious (in a service-learning capstone) or less so (in a more traditional thesis); in either case, students should reflect upon how their capstone and/or future related work might impact the lives of others)

## **Course Credits/Hours of Work**

Honors students should register for thesis/capstone credit (typically 3 credit hours). They may register for HONR 4900, an existing departmental thesis/capstone course, or any approved (by committee and Honors Program Director) course in their majors. Honors recommends registering for 3 credits to ensure that students complete approximately 10 hours of work per week, including meetings, research, planning, project construction, and writing. The number of credits is negotiable, depending on a student's schedule and needs, but the amount of work is not. Capstone projects require the same amount of time for students as an entire course, but the work is focused on the management and completion of one major project.

## **Public Presentation**

All honors capstone projects must be presented publicly at a conference, campus research event, public defense/discussion, performance, show, or other appropriate venue, and students must provide documentation (conference program, teacher letter, committee memo) verifying the completion of these public presentations. In some cases, the public presentation of the project (especially for performances, shows, major service projects, or organized events) will be the key final product of the capstone process. In such cases, a detailed professional portfolio of artistic or other relevant documentation might serve as the record of this crucial public presentation. In all cases, faculty mentors should help students to find the most appropriate venue for their work and document its completion. Spring graduates may participate in the Student Research Symposium on campus in April, and Fall graduates may present at the smaller Fall Research Symposium. Like faculty mentors, the University Honors Program is committed to helping students arrange public presentations, but it is the student's responsibility to seek this support and guidance.

## **Digital Commons**

All honors capstone projects are now archived in the Merrill-Cazier Library's Digital Commons, as well as in hard copy in the Honors office. Students must submit a signed [Electronic Thesis/Capstone Approval form](#) before graduation or request an embargo if their research is in the process of being published. The Honors Program office must have this form on file before any capstone project can be made available on Digital Commons.

## How Do Students Discover Great Project Ideas?

For many students, the honors capstone marks the end of a college career and the beginning of a professional one. Students learn far more than academic skills and information as they complete an honors capstone project: they become creative, critical thinkers who can research independently, communicate across disciplines, and articulate how their ideas can make the world a better place. These skills will continue to shape their work on every future project they undertake. The capstone project may be the first in a career-long program of research and/or creative production.

Remembering that there is not just one perfect capstone project for each honors graduate, students should consider the academic topics and ideas that have most excited or engaged them during their time at USU. Here are some ideas for embarking on this process:

- Consider every class assignment, research opportunity, study abroad experience, internship, and co-curricular activity as an Honors Program “dare to know” more about an exciting idea. Take that dare, and begin pursuing new interests early and often.
- Keep a journal or file of such intriguing ideas, which might occur in classes, in discussions with peers, in conversations with faculty or other mentors, or in extracurricular activities. No engaging idea is insignificant, and a pattern of intellectual interests just might emerge from such a file.
- Choose a mentor—or a few possible mentors—whose classes or research projects have been particularly intriguing, and work with that mentor to craft your own project or to become an apprentice on the mentor’s research project(s).
- Consider the types of final products that might be most useful as you pursue future career, graduate school, or lifetime goals, and talk to faculty about how to create such products.

Perhaps the most important part of deciding on a capstone project idea is to talk with people whose ideas and research you respect. Tell them about your own ideas, and listen to their evaluation of those ideas. Use such conversations to develop ways of turning thoughts into real plans for research. You may not be able to articulate your ideas clearly at first. Scholars often find that in the pursuit of ideas and information that interests them, they eventually discover new connections and the language to describe those connections. If you are willing to listen to and observe others, opportunities will arise. Choosing a mentor first, for example, can sometimes create a place for students on an existing research project. The role of a research apprentice can lay the groundwork for more original research or creative project management in the future. Remember that this honors capstone project is just the first of many future projects—of all different kinds—that you will almost certainly be called upon to lead, manage, and complete. Just get started!

## Brief List of Tasks and Deadlines

- ENROLL IN HONR 3900 **at least one year (3-4 semesters) prior to graduation** (*Students graduating in Fall term may enroll as late as the Spring term prior to graduation, if necessary; students graduating in Spring term should enroll by the Spring term prior to graduation, since the course is not offered during Summer term. Students in some disciplines, particularly those requiring significant laboratory research or focused fieldwork, may need to take this course during sophomore year*)
- SUBMIT HONORS THESIS/CAPSTONE PROPOSAL **by the last day of class in HONR 3900** (*If the proposal needs work, you may be asked to revise, but you must secure final Honors Program approval by the end of the second week in the term before graduation (Fall for Spring grads; Summer for Fall grads).*)
- SUBMIT DETAILED WORK PLAN (expansion of the timeline in the proposal) **by the end of the second week in the term before graduation** (*Fall for Spring grads; Summer for Fall grads*)
- HONORS GRADUATION AUDIT **by the end of the third week in the term before graduation** (*Fall for Spring grads; Spring (not Summer) for Fall grads*) (*Meet with Honors Program Coordinator to determine whether all honors graduation requirements will be met*)
- ENROLL IN ANY REQUIRED CAPSTONE COURSE IN YOUR MAJOR **by the term before graduation** (*Fall for Spring grads; Spring for Fall grads*) (*These classes should ideally be completed before students enroll for Honors Thesis/Capstone credits, since an honors capstone project will often build upon or expand the work of the regular capstone course for the major; taking a required non-honors capstone up to two terms before graduation may be advisable in some cases; check with your Departmental Honors Advisor*)
- FINAL, MENTOR-APPROVED DRAFT DUE TO COMMITTEE MEMBERS **no later than one week before the last day of classes in the student's graduation term**
- DEFENSE AND/OR PUBLIC PRESENTATION OF THE PROJECT **completed by the last day of classes in the student's graduation term and verified with appropriate documentation**
- FINAL DEADLINE OF REVISED, POLISHED PROJECT **no later than one week after the last day of classes, by 5:00 p.m.** (*Must be submitted with required forms: the signed University Honors cover page, the Thesis/Capstone Evaluation form, documentation of public presentation, and the Electronic Thesis/Capstone Approval Form, (see [capstone forms](#)).*)



**Suggested Thesis/Capstone Timeline:** *The University Honors Program recognizes that each student and thesis/capstone project is different and that a variety of circumstances will shape each student's timeline to completion. Honors offers this suggested timeline as a starting point for students and faculty, who will work closely together to develop a timeline that is realistic and feasible for each other and for the proposed project.*

### 3-4 SEMESTERS BEFORE GRADUATION

- Begin thinking about a project topic in the year before graduation (ideally 4 semesters prior to anticipated graduation term).
- Enroll in HONR 3900, a one-credit thesis/capstone preparation course. In this course students will...
  - Learn what is required to complete a capstone project.
  - Study samples of outstanding thesis/capstone projects in their fields.
  - Read samples of outstanding thesis/capstone proposals on related topics.
  - Write brief descriptions of their proposed projects to share with prospective faculty mentors.
  - Secure capstone project mentors and complete their own thesis/capstone proposals by the end of the term.

### 2-3 SEMESTERS BEFORE GRADUATION

- Begin project research, working closely with capstone mentor.
- Develop a detailed work plan and research schedule in collaboration with faculty mentor.
- Complete any required capstone course for your major.

### 2 SEMESTERS BEFORE GRADUATION

- Continue research and/or begin the writing necessary to complete the thesis/capstone project.
- Maintain regular contact with capstone project mentor and committee members; be responsible about completing high quality work in a professional manner.
- Schedule an appointment with Honors Program Coordinator to complete an Honors Graduation Audit prior to the end of the third week of classes. This mandatory appointment will ensure that you have earned enough honors points to graduate with honors the following semester.

### FINAL SEMESTER

- Submit drafts to mentor and committee according to the work plan. Since all projects require multiple drafts, meeting scheduled deadlines is crucial. Students should remember that they are involved in professional relationships with their faculty mentors.
- Complete and document public presentation or defense of the project, which must occur by the last day of classes in the graduation term.
  - FOR SPRING GRADUATES: Students may participate in Student Research Symposium during Research Week. Applications and abstracts are required and are typically due in March.
  - FOR FALL GRADUATES: Students should work with their mentors and the Honors Program office to find appropriate venues for public presentation.
- Provide entire committee with a mentor-approved final draft of the project by the deadline in the work plan, at least one week before the last day of classes.
- Polished, revised, and complete thesis/capstone projects are due to the Honors Program office one week after the last day of classes. When students submit the completed thesis/capstone project, they must also include the University Honors cover page, Thesis/Capstone Evaluation form, documentation of public presentation, and Honors Electronic Thesis/Capstone Approval form (see [capstone forms](#)).
- Attend Honors Program medallion ceremony and graduation celebration party!

## ***Suggested Timeline for Spring Graduates***

### *Spring and Summer terms BEFORE final year (end of junior year)*

Enroll (or have previously enrolled) in HONR 3900 by Spring term. This one-credit class is complete only once a student submits a Thesis/Capstone Project Proposal. Work with mentor to begin project research, including literature review, laboratory work, creative planning, fieldwork, and/or primary source reading.

### *Fall term senior (final) year*

- 1) Spring graduates **must secure final approval of their thesis/capstone proposals from the Honors Program by the end of the second week of Fall term** during their senior year; most students will secure approval before this deadline.
- 2) **By the second week of Fall term**, each student should also have met with his or her committee to finalize a **detailed work plan**, including firm due dates for each draft of the project and for the public presentation or defense, which must be completed and documented by the last day of classes. See Honors office for sample work plans.
- 3) **Complete a Graduation Audit with Honors Program Coordinator by the third week of Fall term.**
- 4) **Complete any required non-honors capstone course for your major.**
- 5) Honors requires several drafts to the mentor plus a final mentor-approved draft to all committee members. Typically, only the primary faculty mentor reads the preliminary drafts, but students are responsible for giving other members of the committee regular progress reports: include these report dates in the work plan. Students should work with their mentors to set up reasonable deadlines for each draft of the project.

### *Spring term senior (final) year*

- 1) Successful students continue to submit drafts and meet regularly with committee members according to the work plan.
- 2) After revising with the faculty mentor, students **submit a polished final draft to their committees at least one week before the last day of classes**. This date allows time for faculty to review the project before a defense (must be completed by the last day of classes) and for students to complete required revisions before the final Honors Program deadline (one week after the last day of classes). Students should remember that the revisions required by mentors and committees are not optional. All honors students must work with their mentors to craft a high quality final project in which both mentor and student take pride. Students will earn honors credit for their thesis/capstone projects only if their mentors and committees believe that the final product is carefully crafted, thoughtfully revised, and professionally presented. Students who do not complete all requested revisions to final projects by the Honors deadline will be ineligible to graduate with honors. It is the student's responsibility to edit and proofread; help is available from the Honors Program Writing Tutor(s).
- 3) *March/April*: Spring graduates may choose to present their work publicly in the USU Student Research Symposium during Research Week. Abstracts are generally due in March for the April event. Contact the Office of Research and Graduate Studies for more information.
- 4) *April*: **All final drafts to committees are due one week before the end of classes; defenses or public presentations must be held and documented by the last day of classes**. Attend Honors Program medallion ceremony and graduation celebration. At the medallion ceremony, students receive honors medallions to be worn at graduation and a certificate for honors achievement; the celebration is a party for all honors graduates. December graduates are invited to attend both events in the spring following their graduation.
- 5) *May*: **All final, revised copies of thesis/capstone projects are due to the Honors office one week after the last day of classes**. The final copy must be carefully proofread and formatted, including the signed University Honors cover page, the Honors Thesis/Capstone Evaluation form, documentation of public presentation, and the Electronic Thesis/Capstone Approval form (see [capstone forms](#)). All thesis/capstone projects are bound and digitized so that they can become a permanent part of the Honors Program library and Digital Commons.

## ***Suggested Timeline for Fall Graduates***

### *Fall and Spring terms BEFORE final year (beginning of junior year)*

Enroll (or have previously enrolled) in HONR 3900 by Spring term. This one-credit class is complete only once a student submits a Thesis/Capstone Project Proposal. Work with mentor to begin project research, including literature review, laboratory work, creative planning, fieldwork, and/or primary source reading.

### *Spring and Summer terms junior year (terms prior to graduation)*

- 1) **Complete a Graduation Audit with Honors Program Coordinator by the third week of Spring term.**
- 2) **Complete any required non-honors capstone course for your major.**
- 3) *March/April (Spring term):* Fall graduates may apply to participate in the USU Student Research Symposium during Research Week, if they have completed enough work to warrant presentation. Abstracts are generally due in March for the April event. Check with the Office of Research and Graduate Studies for more information. Students who choose not to present at Student Research Symposium should work with their mentors and the Honors office to find another public presentation venue for Fall term.
- 4) Fall graduates **must secure final approval of their thesis/capstone proposals from the Honors Program by the end of the second week of Summer term** before their senior year.
- 5) **By the second week of Summer term**, each student should also have met with his or her committee to finalize a **detailed work plan**, including firm due dates for each draft of the project and for the public presentation or defense, which must be completed and documented by the last day of classes. Please keep in mind that most faculty are on 9-month contracts and may not be available to work with students during the summer; students should plan to work throughout the summer and to present faculty with the results of that work at the beginning of their final Fall term. See the Honors office for sample work plans. Honors requires several drafts plus a final mentor-approved draft to all committee members. Typically, only the primary faculty mentor reads the preliminary drafts, but students are responsible for giving other members of the committee regular progress reports: include these reports dates in the work plan. Students should work with their mentors to set up reasonable deadlines for each draft of the project.

### *Fall term senior (final) year*

- 1) Students should meet with mentors during the first week of classes to report on summer work. Successful students continue to submit drafts and meet regularly with committee according to the work plan.
- 2) After revising with the faculty mentor, students **submit a polished final draft to their committees at least one week before the last day of classes**. This date allows time for faculty to review the project before a defense (must be completed by the last day of classes) and for students to complete required revisions before the final Honors Program deadline (one week after the last day of classes). Students should remember that the revisions required by mentors and committees are not optional. All honors students must work with their mentors to craft a high quality final project in which both mentor and student take pride. Students will earn honors credit for their thesis/capstone projects only if their mentors and committees believe that the final product is carefully crafted, thoughtfully revised, and professionally presented. Students who do not complete all requested revisions to final projects by the Honors deadline will be ineligible to graduate with honors. It is the student's responsibility to edit and proofread; help is available from the Honors Program Writing Tutor(s).
- 3) *October/November:* Complete and document public presentation of the project, as necessary.
- 4) *November/December:* **All final drafts to committees are due one week before the end of classes; defenses or public presentations must be held and documented by the last day of classes. All final, revised copies of thesis/capstone projects are due to the Honors office one week after the last day of classes.** The final copy must be carefully proofread and formatted, including the signed University Honors cover page, the Honors Thesis/Capstone Evaluation form, documentation of public presentation, and the Electronic Thesis/Capstone Approval form (see [capstone forms](#)). All thesis/capstone projects are bound and digitized as a permanent part of the Honors Program library and Digital Commons. Students will receive honors medallions to be worn at Spring commencement and a certificate acknowledging honors achievement. December graduates are also invited to attend the Honors Program medallion ceremony and graduation celebration party in late April.

## The Thesis/Capstone Committee

Every student's capstone project committee consists at a minimum of **two faculty members**: the student's **primary faculty mentor** and the student's **Departmental Faculty Honors Advisor (or other designated faculty member)**. The University Honors Program Director also reads each final capstone project to ensure consistency across the USU Honors Program as a whole.

Students should choose their faculty mentors carefully. Mentoring an honors capstone project is a great deal of work. While this kind of work is part of a faculty member's job, some outstanding faculty are already overcommitted, working with many graduate and/or undergraduate students outside of their regular teaching commitments. The best way to secure a faculty mentor is to build several close working relationships with faculty over time. Students can demonstrate their ability in classes, research projects, contract work, and departmental clubs or organizations that collaborate with faculty. Faculty are much more likely to agree to mentor the capstone project of a student who has proven to be bright, organized, dependable, curious, and engaged with the field.

Please carefully review in the pages that follow the responsibilities of the student, the faculty mentor, the committee member(s), and the Honors Program. In general, students are responsible for developing a work plan and meeting that plan's deadlines, performing the plan's proposed research, and composing/revising/formatting the written portion of their projects as outlined in the plan and according to Honors Program guidelines. In turn, the faculty mentor is responsible for guiding the student in the creation of the work plan, mentoring the research and writing processes, and ensuring a high quality of work within the discipline. The Departmental Faculty Honors Advisor or other committee member(s) makes sure that the student is aware of and meeting honors requirements and disciplinary standards. The University Honors Program supports students and faculty and ensures that all thesis/capstone projects meet minimum Honors Program standards and deadlines and thus merit the award of the student's final thesis/capstone honors points.

## *Student Responsibilities*

### COURSES:

- Enroll in HONR 3900, a one-credit course that involves reading past thesis/capstone projects and proposals, deciding on a topic, securing a faculty mentor, finalizing committee membership, and submitting a complete and polished thesis/capstone proposal with all signatures.
- Enroll in HONR 4900 or another approved honors thesis/capstone course. Try to complete any required non-honors capstone course in the major before taking the honors capstone course.
- Schedule a graduation audit with Honors Program Coordinator by the third week of the term before graduation to ensure that you are on track to graduate with honors.

### PROPOSAL:

- Working with faculty mentor, complete a thesis/capstone proposal following the required format, including a basic list of deadlines and a short annotated bibliography or literature review. Submit proposal to committee member(s) and revise to earn committee approval.
- Submit proposal by the end of HONR 3900; resubmission (if necessary) and final approval from Honors must occur by the second week of classes the term before graduation (Fall or Summer).
- In rare cases, if a project changes in fundamental ways, students may need to submit and secure approval for a new proposal, at the discretion of the faculty mentor. No major project changes may be made after the second week of classes in the student's final term.

### WORK PLAN:

- Complete and submit a detailed work plan, using the proposal as a starting point; include a list of all deadlines for research, submission of drafts, updates to committee members, regular (usually at least twice monthly) mentor meetings, and public presentation time/place.
- Plan must include key dates, particularly submission of final draft to committee (one week before the last day of classes), public presentation/defense (by the last day of classes), and final deadline to Honors (one week after the last day of classes).
- Agree upon work plan with mentor and other committee member(s); submit plan to Honors by the end of the second week of classes in the term before graduation.

### PROFESSIONALISM AND DRAFTING:

- Follow the work plan in a timely and professional manner.
- Apply for appropriate research or travel funding to support the project (e.g., Honors Research and/or Study Abroad Funds, URCO grants, USUSA support, departmental or college funding).
- Discuss any proposed changes to work plan or deadlines with faculty mentor well in advance of those deadlines or risk jeopardizing honors graduation.
- Submit to mentor all required drafts of the project and revise as instructed.
- Proofread and edit carefully. The Honors Writing Tutor(s) can help with this work—start early.
- Submit a final draft to the committee one week before last day of classes. Revise as instructed.

### PUBLIC PRESENTATION:

- Arrange for public presentation of the project. The mentor and Honors office can help, but it is the student's responsibility to decide on the venue and make all arrangements. Public presentation or defense must be completed and documented by the last day of classes in student's graduation term.

### FINAL PRODUCT:

- Make all revisions suggested by faculty mentor and other committee member(s).
- Submit the final product to the Honors office no later than one week after last day of classes.
- The final product of the capstone project should be carefully proofread and formatted, and it must include the signed University Honors Capstone Cover Page, the Honors Thesis/Capstone Evaluation form, documentation of public presentation, and the Electronic Thesis/Capstone Approval form ([see capstone forms](#)).

## *Faculty Mentor Responsibilities*

### COURSES:

- Work with student enrolled in HONR 3900 to finalize committee membership and to draft and polish a thesis/capstone proposal.
- Serve as faculty mentor and/or instructor of record for HONR 4900 or other approved honors thesis/capstone course. If the student is required to complete a standard capstone course in the major, help articulate how honors project will substantially add to and extend the work done in that course.

### PROPOSAL:

- Mentor student in shaping capstone idea and writing thesis/capstone proposal. Ensure that student follows the format of the [proposal form](#), including a basic list of deadlines and a brief annotated bibliography or literature review. The proposal should outline a high quality project in the discipline.
- Remind student about proposal deadlines: must submit to Honors by end of HONR 3900 and secure Honors approval by the second week of classes in the term before graduation (Fall or Summer).
- In rare cases, if a project changes in fundamental ways, students may need to submit and secure approval for a new proposal, at the discretion of the faculty mentor. No major project changes may be made after the second week of classes in the student's final term.

### WORK PLAN:

- As early as possible, work closely with student to create a detailed work plan, using the proposal as a starting point; include specific deadlines for research milestones, writing and draft submission, reports to committee members, regular (usually at least twice monthly) meetings with mentor, and time/venue for public presentation.
- Ensure that work plan includes all key dates, particularly submission of mentor-approved final draft to committee (one week before the last day of classes), public presentation/defense (completed and documented by the last day of classes), and final deadline to Honors (one week after the last day of classes).
- Prompt student to get approval for work plan from other committee member(s) and then to submit the plan to Honors by end of second week in term before graduation (Fall or Summer).

### PROJECT OVERSIGHT:

- Communicate with student about the professional importance of following the work plan.
- Encourage student to apply for research/travel funding to support the project (e.g., Honors Research and/or Study Abroad Funds, URCO grants, USUSA support, departmental or college funding).
- Students may not change deadlines without securing faculty mentor approval well before the deadline they propose to change. If students miss two deadlines or ask for frequent, disruptive changes to the work plan, faculty mentors should notify the Honors office immediately.
- Require several drafts of the project and give the student prompt, detailed feedback. Final mentor-approved draft is due to committee no later than one week before the last day of classes in final term.

### PUBLIC PRESENTATION:

- Discuss with student possible venues for public presentation and encourage student to apply as appropriate for honors, university, and departmental travel funding. Public presentation or defense must be completed and documented by the last day of classes in student's graduation term.

### FINAL PRODUCT:

- Ensure that the student has made all of the committee's required revisions and that the final product represents high quality honors work in the discipline. Insist that student proofread and edit.
- Communicate with student about final deadlines and requirements for the project: the student must submit carefully proofread and formatted final product with all necessary forms to Honors no later than one week after the last day of classes in the term of graduation. Sign only once read/approved.

### ***Committee Member/Departmental Honors Advisor Responsibilities***

*Departmental Honors Advisors typically serve as the second committee member on each honors thesis/capstone committee in their home departments. Departments with many graduates may choose to share this responsibility. While it is advisable to choose a committee member with detailed knowledge of the Honors Program, students and their mentors are free to decide how best to shape the committee, and they may certainly choose members with particular expertise in the discipline. Committees may consist of more than two faculty members, depending on the needs of the student and project. The responsibilities of these committee members include:*

#### **COURSES:**

- Even DHAs who do not serve on the committee are responsible for meeting with students enrolled in HONR 3900 and helping them to identify suitable faculty mentors, finalize committee membership, and review thesis/capstone project requirements on the Honors Program website.
- Students usually enroll in either HONR 4900 or another departmental honors thesis/capstone course for thesis/capstone project credit; any substitution requires the entire committee's approval.

#### **PROPOSAL:**

- Read proposal promptly once mentor and student complete it; indicate approval by signing, or offer feedback and then sign once changes are made.
- Support student in meeting proposal deadlines: must submit to Honors by end of HONR 3900 and secure Honors approval by end of second week in term before graduation (Fall or Summer).
- In rare cases, if project changes in fundamental ways, students may need to submit and secure approval for a new proposal, at the discretion of the faculty mentor. No major project changes may be made after the second week of the student's final term.

#### **WORK PLAN:**

- Verify that work plan includes a timeline for regular updates to committee members on project progress, as well as all key dates, particularly submission of mentor-approved final draft to committee (one week before the last day of classes), public presentation/defense (by the last day of classes), and final deadline to Honors (one week after the last day of classes).
- Suggest changes and/or approve work plan before the deadline for submitting the work plan to Honors (the end of the second week of classes in the term before graduation).
- Committee members may choose to require students to submit a draft or drafts to them; please build due dates into the work plan.

#### **PROJECT OVERSIGHT:**

- Be willing to meet with student as requested or as indicated in work plan. Committee members are not responsible for initiating meetings.
- If committee member has asked for drafts, he or she is responsible for giving the student prompt, detailed feedback, as indicated in the work plan.
- Expect to receive the mentor-approved final draft of the project one week before last day of classes.

#### **PUBLIC PRESENTATION:**

- Discuss with student possible venues for public presentation and encourage student to apply as appropriate for honors, university, and departmental travel funding. Public presentation or defense must be completed and documented by the last day of classes in the student's graduation term.

#### **FINAL PRODUCT:**

- Ensure that student has made all of the committee's revisions and that the final product represents high quality honors work in the discipline. Insist that student proofread and edit.
- Communicate with student about deadlines and requirements for final product, which must be proofread, formatted, and submitted to Honors with all forms one week after the last day of classes. Sign only once read/approved.

## ***University Honors Program and Director Responsibilities***

*The Honors Program Director does not actively participate in mentoring each project but serves instead to ensure that the project meets University Honors Program standards. Honors Program responsibilities include:*

### **COURSES:**

- Each term, the Honors Program offers HONR 3900, a one-credit, pass/fail course that requires students to read past thesis/capstone projects and proposals, decide on a topic, secure a faculty mentor, finalize committee membership, and submit a complete, polished, signed thesis/capstone proposal.
- Students usually enroll in either HONR 4900 or another approved honors thesis/capstone course for thesis/capstone project credit; advise students to complete any required non-honors capstone course in the major before enrolling for honors thesis/capstone credit.
- The Honors Program is available for individual consultations at any time to answer the questions of thesis/capstone mentors and committee members.

### **PROPOSAL:**

- The Director gives final approval on the thesis/capstone project proposal; all proposals must be submitted by the end of HONR 3900 and then resubmitted, if necessary, to earn final approval by end of second week in term before graduation (Fall or Summer).

### **WORK PLAN:**

- The Honors Program archives work plans and shares them with students and faculty.
- Honors staff ensures that work plans are submitted on time (the end of the second week of classes in the term before graduation) and notifies student and faculty mentor if deadline is missed.
- Once work plan has been submitted, the Honors Program verifies that it includes key dates for submission of mentor-approved final draft to the committee (one week before the last day of classes), public presentation or defense (by last day of classes), and submission of the revised final project to Honors (one week after the last day of classes).

### **PROJECT OVERSIGHT:**

- The Honors Program and Director provide support, as requested, to students, faculty mentors, and committee members involved in thesis/capstone projects.
- The Honors Program guarantees timely review of applications to the Honors Research and Study Abroad Funds and supports students in applying for other funding.
- The Honors Program staff communicates with students about all upcoming or missed deadlines.

### **PUBLIC PRESENTATION:**

- The Honors Program staff assists students in finding appropriate venues for public presentation. Public presentation or defense must be completed and documented by the last day of classes in the student's graduation term.

### **FINAL PRODUCT:**

- The Honors Program Writing Tutor(s) can help students carefully proofread and format the final project. The Honors staff and Director ensure that students submit a high quality project by the deadline (one week after the last day of classes) and include with the project the signed University Honors cover page (indicating that mentor and committee members have read and approved the project), the Honors Thesis/Capstone Evaluation form, documentation of public presentation, and the Electronic Thesis/Capstone Approval form (see [capstone forms](#)).
- The Honors Program Director reads all thesis/capstone projects to ensure that all projects meet or exceed program standards and signs the cover page to approve.



## Resources and Assistance

**Scholarships:** Please see [the Honors Program scholarships webpage](#) for a complete list.

*Scholarships specifically designed to support students working on honors capstone projects include the following:*

- **Helen B. Cannon and Lawrence O. Cannon Awards:** These \$1000 scholarships are awarded to two outstanding juniors preparing to complete capstones in the coming year. One scholarship goes to a student in the humanities, arts, social sciences, business, or education; the other is awarded to a student in science, math, engineering, or technology. The awards committee reviews capstone plans, achievements in honors, and future goals. Spring and Fall graduates are welcome to apply by JANUARY 15.
- **Morse Scholarship:** This \$500 scholarship is awarded to an outstanding junior who is working toward graduating with honors in the next year. The awards committee reviews capstone plans, achievements in honors, and future goals. Due JANUARY 15.
- **Honors Research/Study Abroad Funds:** These awards typically range from \$50-\$1000 and support student research, study abroad, conference participation, and other scholarly or creative activity. The Honors Program accepts applications on a rolling basis.
- **Undergraduate Research and Creative Opportunities (URCO) Grants:** Many honors students apply for and win UCRO grants for their capstone research. URCO deadlines are October 15 and February 15; more information is available on the [Office of Research and Graduate Studies website](#).

**Facilities and Computing:** *Honors students are welcome to make use of the student lounge in the Honors Program office (LLC, Building A). We have a desktop computer and a laptop available for checkout during business hours. The office also offers...*

- **Honors Thesis Archives:** The Honors office houses and indexes copies of all honors thesis/capstone projects completed at USU since 1971 (Honors was founded in 1964). More recent projects (2009-) are also available through [USU Digital Commons](#).
- **Computer facilities/study room:** All honors students have access to the Joyce Kinkead Honors Study Room on the third floor of the library. The computer facilities in the study room are available during regular library hours. We encourage students working on their capstone projects to use this resource.

**Writing and Editing:** *Honors hires an Honors Writing Tutor from the USU Writing Center. This tutor holds regular office hours and is trained to help students improve writing at any level, from a paper for an introductory course to a thesis/capstone project. The Honors Writing Tutor can help students learn to proofread and edit effectively; students MUST do this polishing work on their thesis/capstone projects and are encouraged to make use of this resource.*

- **Thesis/Capstone Support on Canvas:** Honors also creates and maintains a Canvas support page for all students working on thesis/capstone projects. All students who earn final approval on their formal thesis/capstone proposals are automatically added to this site. Students may chat with peers, ask Honors Program staff specific questions, and find information about upcoming deadlines and opportunities on this page.

## Suggestions for Formatting the Thesis/Capstone Project

Because disciplines have different standards and conventions, thesis/capstone projects do not all look the same. Below is the standard structure of a thesis/capstone project, with **REQUIRED** sections indicated in **BOLD**. Students are encouraged to organize their projects in this recommended order, unless their faculty mentors decide that another discipline-specific format is more appropriate. Please include all **BOLD** sections.

1. **Title page (REQUIRED, not paginated—see [template](#)):** Please provide places for all committee members to sign and spell all names correctly.
2. Copyright notice (*recommended – paginated*): The Honors Program recommends that students include the copyright page as the first page in any submitted document unless the research is subjected to provision of research contracts, patent rights, or other agreements made by the student or faculty mentor with USU. Faculty and students should be aware that all thesis/capstone projects submitted to the Merrill-Cazier Library are for public use. Students should include a copyright notice immediately following the title page. This page should be numbered; center the notice on the page and format it as follows:

Copyright 2016 Your Name

or

© 2016 Your Name

All Rights Reserved

3. **Abstract (REQUIRED: begin pagination here with lower-case Roman numerals (i, ii, iii...);** see Honors office for examples of abstracts): The abstract is typically a 250-500 word summary of the project's research question, methodology, and results/conclusions. An abstract is designed to help readers understand quickly and efficiently what the project does: please include any crucial part of your project (thesis statement, hypothesis, etc., depending on your field).
4. Dedication/preface (*optional – continue Roman pagination*): usually very brief, e.g., “For my family.”
5. **Acknowledgements (REQUIRED: continue Roman pagination):** Students typically thank their faculty mentors, any members of their research teams, their departments and colleges, and anyone else who has supported the project. They often also thank any organizations that helped fund any part of the project (USUSA, URCO, the University Honors Program, departments or colleges, etc.). They may also add personal acknowledgments, as desired.
6. Table of Contents (*recommended – not paginated itself; may be brief for some capstone projects*): Indicate major sections of project and beginning page numbers, including chapters and appendices or, at a minimum, Final Written Product, Bibliography, and Reflective Writing sections.
7. List of Tables, Figures, Photos, Definitions, etc. (*recommended if project includes such information: not paginated itself*; include page numbers on which tables, figures, or photos appear)
8. **Final Written Product (REQUIRED: begin Arabic (1, 2, 3) pagination):** Must be completely edited and free of errors; **include word count of this section, if applicable, on first page** (see **Requirements** for more information).
9. **Reflective Writing (REQUIRED: continue Arabic pagination; include word count** and see **Requirements** for minimum).
10. Endnotes (*optional, depending on bibliographic style: continue Arabic pagination*; not necessary if using footnotes or if not including any notes).
11. Bibliography or Works Cited list (*highly recommended but guided by discipline: continue Arabic pagination*; minimum 15 sources that the paper quotes or uses as background, formatted correctly according to disciplinary conventions).
12. Appendices (*optional, depending on project; if project includes non-written materials, please do include those materials, preferably on DVD or in charts/tables, in this section: continue Arabic pagination for cover sheets or any included pages*).
13. **Professional Author Bio (REQUIRED: continue Arabic pagination):** Written in third person, this paragraph includes student's major/minor, college academic accomplishments, and future plans.

## Frequently Asked Questions

### ***Are students required to complete their thesis/capstone projects in their majors?***

Designed as the culmination of the honors student's undergraduate educational experience, the honors thesis/capstone project should focus on some area of interest in the student's major (or sometimes minor) field. This choice allows students to develop close professional relationships with faculty in their academic disciplines. Because Honors emphasizes interdisciplinary learning, the program also allows and encourages students to pursue interdisciplinary projects, provided these projects extend disciplinary knowledge in meaningful ways.

### ***Can a thesis/capstone project re-work a previous paper or project?***

It is academically dishonest to recycle, with minor additions or changes, a paper already completed and submitted for a grade or honors contract. A student who proposes to add a different introduction or a longer conclusion, more examples, or illustrations to an existing paper is certainly not proposing anything that can be considered the capstone of an honors education; such work is therefore unacceptable. However, a thesis or capstone project that builds upon and extends a student's past work in new and deeper ways is indeed a capstone to an undergraduate education. Students often develop capstone ideas from successful honors contracts, which students can productively use to complete some preliminary research in their areas of interest. Contracts can thus serve as a means of testing out ideas that students might want to pursue in more depth their capstone projects. Similarly, a required non-honors capstone course in the major often allows a student to complete a chapter, portion, or starting point for an honors thesis/capstone project.

### ***What if students cannot complete all of the work described in their formal thesis/capstone proposals?***

As students work on their capstone projects, they will almost certainly find that the project changes and develops in unexpected ways; such changes are part of the research process and should cause no concern as long as the project continues to grow and progress. Often as students complete their research, they work with their faculty mentors and committee members to narrow or refocus the project as necessary. Similarly, if students discover that essential materials or equipment are unavailable, they should work with their mentors and committee members to modify the project appropriately. It is always acceptable for students to shift the focus of the project if they do so with the help of their mentors and with the agreement of all members of the thesis/capstone project committee. If students and committee members cannot come to an agreement about how to modify a project, the Honors Program Director can help the group to find a solution. If the project changes in fundamental ways, students may need to submit and secure approval for a new thesis/capstone proposal, at the discretion of the faculty mentor. No major project changes may be made after the second week of the student's final term. Please note that any major change to the project must earn approval of the entire committee, as well as the Honors Program Director.

### ***What happens if a student fails to complete the thesis/capstone project?***

Students graduate with honors only if they complete their thesis/capstone projects, and the Honors Program therefore makes every effort to help students succeed. In extenuating circumstances, if students decide that they cannot complete their projects, they should 1) immediately notify the Honors Program and Director of the decision, and 2) understand that they will not earn an "A" in a designated thesis/capstone class. The Honors Program Director will consult with the faculty mentor and the Departmental Faculty Honors Advisor/committee member to determine an alternate assignment (usually a shorter paper) and grade (no higher than a "B"). If students make this decision early in the semester, they may petition to withdraw from HONR 4900 or other approved thesis/capstone course and register for an independent study in their major without penalty. Please consult with the Honors office about this possibility.

## Examples of Outstanding Projects

*These projects are available in the Honors office in LLC, Building A, or in Digital Commons (2009-present). Please notice that some of these capstone projects have been published (citations and links included).*

### College of Agriculture and Applied Sciences

#### *Animal, Dairy, and Veterinary Sciences*

- Sara Calicchia, “DNA Methylation Analysis of LIN28A and HAND1 in Electrostimulated Genetically Unmodified Porcine Fibroblast Cells Grown In Vitro,” Spring 2015.
- Karmella Dolecheck, “Effects of Supplementing *Propionibacteria* in Lactation Dairy Diets on Ruminant Fermentation in Continuous Cultures,” Spring 2012.

#### *Landscape Architecture and Environmental Planning*

- Nicholas Decker, “Public Art and Land Value: Spatial Relationships in Denver, Colorado,” Spring 2015.
- Laura Patricia Reyes Romero, “Bioclimatic Design Guidelines: A Valuable Tool for Landscape Architects,” Spring 2012.

#### *Nutrition and Food Sciences*

- Hilary Annie Smith, “The National School Lunch Program: History of the Past, Challenges of the Present, Solutions for the Future,” Spring 2006.
- Amanda Spackman, “EBT at Farmer’s Markets is a SNAP,” Spring 2013.

#### *Plant Science*

- Kevin Cope, “Developing an Optimized Light Spectrum for Plant Growth and Development” Spring 2013 – published at <http://hortsci.ashspublications.org/content/48/4/504> (Cope, Kevin, and Bruce Bugbee. “Spectral Effects of Three Types of White Light-emitting Diodes on Plant Growth and Development: Absolute versus Relative Amounts of Blue Light” *HORTSCIENCE* 48.4 (2013): 504–509.)

### Caine College of the Arts

#### *Art*

- Janell Amely, “How Combining Constructivism and Open Source Code Can Open New Realms for Interactive Sculpture,” Spring 2015.
- Stevie Dutson, “Visual Narratives: Storytelling in the Digital Age,” Spring 2013.

#### *Interior Design*

- Laura Taylor, “Common Threads: An Examination of Common Threads of Design Value, Woven Together by Designers to Achieve Elevated Products Across Disciplines,” Spring 2015.

#### *Music*

- Andrea Decker Moreno, “The Cult of Socrates: The Philosopher and his Companions in Satie’s *Socrate*,” Spring 2013.

#### *Music Therapy*

- Marti Bowles, “African Drumming: An Examination of Drumming in Ghana, Its Intentions, and Application in Music Therapy Practice,” Spring 2013.

- Rebecca Tanner, “Using Songwriting to Assist the Healing Process of Victims of Domestic Violence,” Spring 2012.

## **College of Business**

### *Economics*

- Kjersten Adams, “Microfinance as an Effective Development Solution: The Case of Mongolia,” Summer 2012.

### *Management Information Systems*

- J. Myles Powell, “The Impact of Virtual Private Network (VPN) on A Company’s Network,” Spring 2010.

### *Marketing*

- Gracie Arnold, “Women-Owned Business Branding: Consumer Behavior Based on Hedonic vs. Utilitarian Positioning,” Spring 2015.

## **College of Education and Human Services**

### *Communicative Disorders and Deaf Education*

- Amy Baxter, “Maximum Repetition Rates in Children At-Risk for Dyslexia,” Spring 2006.
- Kalley Ellis, “Classroom Amplification: The Necessity of Sound-Amplification in the Classroom,” Fall 2014.

### *Elementary Education*

- Michelle Pfost, “The Effectiveness of Storytelling in Mathematics Teaching,” Spring 2015.
- Gentry Seawright, “Children’s Responses to Storybook Reading,” Spring 2009.

### *Psychology*

- Joseph Clyde, “Medical Professionalism: An Experimental Look at Physicians’ Facebook Profiles,” Fall 2012 – published at <http://med-ed-online.net/index.php/meo/article/view/23149> (Clyde, Joseph, Melanie M. Domenech Rodríguez, and Christian Geiser. "Medical professionalism: an experimental look at physicians' Facebook profiles." *Medical Education Online* [Online] 19 (2014): n. pag. Web. 26 Jan. 2015.)
- Jonathan Rich, “Contextual Differences in Reinforcement Affect Self-Control in SHR and WKY Subjects,” Spring 2015.

## **College of Engineering**

### *Biological Engineering*

- Candace N. Clark, “Automation of Tangential Flow Filtration for Purification of Biosynthetic Spider Silk,” Spring 2012.

### *Civil Engineering*

- Ren Gibbons, “Right Hand Fork Pedestrian Bridge Final Report,” Spring 2015.

### *Electrical and Computer Engineering*

- Samuel Mitchell, “Lateral Control of a Vehicle Platoon,” Spring 2015.

### *Mechanical and Aerospace Engineering*

- Matthew Munsee, “Binding Innovation Technologies, Restoring Freedom to the World of Snowboard Bindings,” Spring 2015.

### *Computer Science*

- Amy Hansen, “An Empirical Study of Student Programming Bugs,” Spring 2011.

## **Colleges of Humanities and Social Sciences**

### *Anthropology*

- Brandi Jensen Allred, “Wickiup Site Structure: A Comparison of Aboriginal Wooden Features from the Great Basin and Colorado Plateau,” Spring 2015.
- Martin Welker, “The Southeast in Context: An Assessment of the Trauma Associated with Agriculture,” Spring 2013.

### *English*

- Anna Bullock Brown, “Not Shut in by any Fence,” (creative thesis), Spring 2013.
- Shay Larsen, “GodBeast: Graphic Memoir as a Tool for Imaginative Leaping,” Spring 2015.
- Cambri McDonald Spear, “Reforming the Performance of Masculinity: Stephen Crane’s Critiques of Riis’s and Roosevelt’s Civic Militarism,” Fall 2014.

### *History*

- Lafe Conner, “Monuments and Massacre: The Art of Remembering,” Spring 2006.
- Seth Jeppesen, “Menander's *Samia*: A New Translation,” Spring 2006.

### *Journalism and Communication*

- Natalie Andrews and Brooke Nelson, “Losing Face: Why more media literacy education is needed in Utah's public school curriculum,” Spring 2006.

### *Religious Studies*

- David Youd, “Gigantomachy in *Aeneid* 2,” Spring 2015.

### *Sociology*

- Rachel Jaggi, “Queering Gender: How Transgender College Students Navigate Gender,” Spring 2011.

### *Spanish*

- Blain Chaise Housley and Brandon Kay Shumway, “Medical Interpretation in Cache Valley Clinics,” Fall 2013.

## **College of Natural Resources**

### *Conservation and Restoration Ecology*

- Kelly Jean Sivy, “Effects of Direct and Indirect Predator Cues on Heteromyid Seed Preference and Seed Fate,” Spring 2009 – published at <http://www.sciencedirect.com/science/article/pii/S1146609X11000488> (Sivy, Kelly, Steven Ostoja, Eugene Schupp, and Susan Durham. “Effects of rodent species, seed species, and predator cues on seed fate.” *Acta Oecologica* 37.4 (2011): 321-328.)

### *Watershed Science*

- Katie Fisher, “Comparing Trophic Level Position of Invertebrates in Fish and Fishless Lakes in Arctic Alaska,” Spring 2013.
- Erin Fleming Jones, “Mercury Transfer from the Monimolimnion to *Artemia Franciscana* in the Great Salt Lake (UT),” Spring 2013.

### *Wildlife Science*

- Jason Carlisle, “Application of Habitat and Occupancy Modeling to a Wood Duck Nest Box Program,” Spring 2011.
- Jamie Reynolds, “Quantifying Non-game Fish Sampling Biases and Demographics to Better Understand the Role of Fish in Pelican Diet and Distribution at Strawberry Reservoir, UT,” Spring 2015.

## **College of Science**

### *Biology*

- Jorgen Madsen, “Increasing Vaccine Accessibility through Cost Alternative Manufacturing and Elimination of the Cold Chain,” Spring 2015.
- Austin Spence, “The Effects of ZNO Nanoparticles on Egg, Larva, and Adult Rough-Skinned Newts (*Taricha Granulosa*),” Spring 2015.

### *Biochemistry*

- Brooke Siler, “Investigating the Importance of the N-Terminal Negative Residues in Human PRMT1,” Fall 2013.

### *Geology*

- Melissa Jackson, “Bracketing the Age of the Great Gallery Rock Art Panel in Horseshoe Canyon, Utah by OSL Dating of Associated Alluvial Terraces,” Spring 2010.

### *Mathematics*

- Aleece Blake, “Improving Utah State University's Healthcare Plan,” Spring 2006.

### *Mathematics Education*

- Morgan Summers, “Critical Issues in Middle and Secondary Mathematics Placement: A Case Study,” Spring 2011.
- Michael Buhler, “Spock, Euler, and Madison” Graph Theory in the Classroom,” Fall 2012.

### *Physics*

- Robert Welch Call, “Carbon Nanotube Growth Via Spray Pyrolysis,” Spring 2011.

### *Statistics*

- John Kidd, “Curds and Whey: Little Miss Muffit’s Contribution to Multivariate Linear Regression,” Spring 2013.

## **Advice from Past Honors Students:**

### ***Gracie Arnold – Marketing***

“When [...] students attempt to complete a capstone project, surrounding themselves with strong professionals and advisors can make all the difference.”

### ***Sam Beirne – Wildlife Science***

“I would ... recommend starting the capstone process early and ... writing at each stage of the process. Starting ... early produces a more comprehensive and thorough paper. Writing at each stage of the process is a good way to document the project more effectively without trying to remember every detail at the last minute. I also kept a notebook with all of the components of my project for reference.”

### ***Sara Calicchia – Animal, Dairy, and Veterinary Science***

“I was told to take extremely detailed notes in my laboratory journal during the laboratory research phase, and I am very thankful for that piece of advice. I had run so many different reactions and there were so many figures and results in the notebook that sifting through the critical parts of the procedure was a large task. After I found the information I needed, the Methods section was basically already written for me.”

### ***Nicholas Decker – Landscape Architecture***

“Seriously consider what you want to study in depth as you write your initial proposal. Professors are an excellent resource at this stage, especially because they understand what it takes to develop a thorough piece of research specific to your field. Spend time with them as a junior and, if possible, before then. Executing a thesis project as part of a professor’s research is another excellent way to stay on track.”

### ***Natalie (Andrews) Evans – Journalism and Communication***

“My thesis was a cause I cared about, and for a semester I felt like a woman with purpose. I spent days presenting in high schools and displayed the results at the Student Showcase. Make sure you have a supportive faculty advisor. Mine really went to bat for me. He found classrooms for me to present in, teens to survey that fit my demographic, everything. He became a great mentor for my senior year of college; he always wanted to know what I was doing afterwards, and he’s part of the reason I have the job I do now as a reporter at the *Herald Journal*. So get a good advisor, because life after graduation is important, and you never know when a current professor may have taught your future boss like mine did.”

### ***Samuel Mitchell – Electrical Engineering***

“It was a proud moment when the controller that I designed [for my capstone project] worked better than the systems I had found from professional journals. It is quite apparent that most of the papers I had read were more concerned with producing a novel method than developing a controller that simply works. This was the first time that I saw that my research mattered outside of my lab. I realized what I was doing was something where I could contribute to the scientific community at large.”

### ***Brooke Nelson – Journalism and Communication***

“Do as much of your project on your own as possible. Faculty support is essential (keep asking professors for help until you find someone as passionate and supportive of your project as you are), but you will be more productive and feel more in control if you are the one setting the schedule and identifying the goals. Professors should only be there to double-check your research and offer advice when you start feeling overwhelmed or become thrown by something you find along the way. Natalie and I had a great experience with our mentor. He checked in with us every two weeks to see if we needed help, but stayed completely out of the planning. This project was completely our own, and after as many hours as you will spend on it, that’s a feeling you’re going to want to have.”



### ***Madalyn Page – Anthropology***

“I would strongly encourage students to try and publish their honors thesis because even though the shiny gold honors medal is worth it as a reward for completion, I would assume that every honors undergraduate thesis represents the potential of a person and the potential of where their academic research field is headed.”

### ***Luke Petersen – Agriculture***

“Work closely with your supervising professor and try not to put it off until the end of your last semester. No matter how easy your class load might seem your last semester, you don’t have time to procrastinate.”

### ***Michelle Pfost – Elementary Education***

“A piece of advice that I would give future students completing an honors thesis is to make sure to choose a topic that you are passionate about. My first topic was one that I was interested in, but I knew that I wouldn’t be motivated enough to complete it. By doing something that I can actually use in my future career, I was able to complete this project even when being super busy! So you can do it and it is possible!”

### ***Laura Pruitt-Stephens– Psychology***

“My top two pieces of advice to those completing an honors thesis are:

1. Start Early; it takes longer than you may think.
2. Don't give up: if you are planning to go on to graduate school, knowing the process will provide you with invaluable experience and insight.”

### ***Christine (Merrill) Russell – History***

“Because I completed an honors thesis, I was able to create a project I really wanted to do with a professor who specialized in that area – as opposed to attending a class with a professor [...] who is a specialist in another area, and with students who pick the easiest subjects they can to get by. I can’t honestly say that I did more work, even, but simply that I had a greater opportunity to dig a little deeper and have a little more fun with a thesis that fit me perfectly. Thanks to the Honors Program!”

### ***Brooke Sorenson – Elementary Education***

“Start early! Your thesis isn’t a project that should be tackled in the last semester of your senior year because it should be something you are interested in or have been thinking about for several semesters. My thesis was the capstone of my education at Utah State, and I wanted to put the time into it that would make it be a worthwhile project. When deciding just exactly how to complete my thesis, I found it very helpful to have another reason for completing it other than to fill the honors requirement for graduation. A big project like this should be useful for something other than to sit on a shelf and never be read. I decided that, from my research, I could write an interesting article and get it published in a scholarly journal (which I did.) I also used my research to conduct a good staff development/training meeting at my student-teaching elementary school. Being able to actually use my research for something was much more rewarding than just handing it in to the Honors office.”

### ***Austin Spence – Biology***

“I only ever took one English class, yet I spent more time writing my thesis and manuscript than I did coming up with the idea or doing the data collection. I also was only required to take one statistics class for my major, but my mentor told me early to take as many statistics classes as possible. With this advice, I took four more stats classes, and I can already see how helpful it is.”

### ***Laura Taylor – Interior Design***

“I would recommend [that] future students ... find some support at the peer level so that they are not always relying no support from their faculty advisor alone.”

### ***Karen Tew – Biology***

“My most important piece of advice to future honors students is this: go get started. It isn’t fun to have “write my thesis” on your to-do list for an entire semester, hanging over you and constantly being in the back of your

mind. Trust me – if you start with a good format and outline, work on the main writing portion a little bit each week, continue reading related papers, and ask for other people to proofread it often, your thesis will be done quickly and with minimal stress.”

***Marilize Van der Walt – Biology***

“This study [is] what made my experience at Utah State University so fantastic. I will always remember the things I learned, the wonderful adventures I was a part of, and my accomplishments in my time here. This capstone project will be with me for the rest of my career!”

***Matthew Wright – English***

“Immerse yourself in the project. Extracurricular, unsolicited, non-required research sets you miles ahead of the competition for grad school and job placement. And how else are you gonna fill the hours? Think about it: you're already a nerd.”

***Robert Wright – Psychology***

“The reason I was accepted into my graduate Ph.D. program was due to the fact that I completed an Honors thesis. I wish I would have known about it earlier. . . . The honors thesis is a great instrument for furthering our education and I think more people should take advantage of it.”